REMARKS

I. Introduction

In response to the Office Action dated August 13, 2008, which was made final, and in conjunction with the Request for Continued Examination (RCE) submitted herewith, claims 2, 20 and 38 have been canceled, and claims 1, 19 and 37 have been amended. Claims 1, 3-9, 11-19, 21-27, 29-37, 39-45 and 47-54 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Prior Art Rejections:

In section (5) of the Office Action, claims 1-5, 7, 10, 19-23, 25, 28, 37-41, 43 and 46 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of U.S. Patent No. 7,082,411 (Johnson) and U.S. Patent No. 5,812,988 (Sandretto). In section (6) of the Office Action, claims 6, 24 and 42 were rejected under 35 U.S.C. §103(a) as being obvious over Johnson in view of Sandretto and further in view of U.S. Patent No. 5,852,811 (Atkins). In section (7) of the Office Action, claims 8-9, 11-17, 26-27, 29-35, 44-45 and 47-53 were rejected under 35 U.S.C. §103(a) as being obvious over Johnson in view of Sandretto and further in view of "Fundamentals of Financial Management" (Kuhlemeyer).

However, in section (8) of the Office Action, claims 18, 26 and 54 were indicated as being allowable if rewritten in independent form to include the base claim and any intervening claims, and if rewritten to overcome the rejections under 35 U.S.C. §112, second paragraph.

Applicant's attorney acknowledges the indication of allowable claims, but respectfully traverses the rejections. Specifically, Applicant's attorney submits that the combination of Johnson and Sandretto does not teach or suggest all of the various elements of Applicant's amended independent claims.

Nonetheless, the Office Action asserts the following:

> 5. Claims 1-5, 7, 10, 19-23, 25, 28, 37-41, 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 7,082,411 to Johnson et al (hereinafter Johnson) in view of US Patent Number 5,812,988 to Sandretto (hereinafter Sandretto).
>
> As per claims 1, 19 and 37
>
> Johnson discloses selecting accounts, amounts and rates (asset data) from account data stored in a database using selection criteria specified by one or more rules (column 4, lines 10-19) and performing one or more Net Present Value

(NPV) calculations on the selected accounts by applying one or more NPV attrition rules (discount factor) to the selected accounts using the selected amounts and rates, wherein the NPV calculations determine a present value of an expected profitability value (score) of current products (column 9, lines 3-26). Johnson further discloses matching the NPV attrition rule against the selected accounts (column 4, lines 10-15 and column 9, lines 3-11) and calculating an NPV expected value using the effective attrition rate (column 9, lines 3-11). Examiner notes that Johnson further discloses assessing asset and respective data using an iterative and adaptive process (column 4, lines 10-13).

Examiner notes that applicant's specification conceptually defines attrition rates as "the rate at which a cash flow will be decreased" (page 8, lines 25-26). Johnson teaches a discount factor. One skilled in the art at the time the invention was made would understand that a discount factor is a rate used to discount or decrease future cash flow to obtain a net present value (NPV).

Johnson does not specifically teach matching the matched accounts to results of NPV forecast rules, obtaining an attrition rate for the matched accounts, calculating an effective attrition rate for each forecast period, performing the NPV attrition rule to calculate an NPV expected value using the effective attrition rate and storing the NPV expected value.

Sandretto teaches matching the matched accounts to results of NPV forecast rules (column 8, lines 65-67), obtaining an attrition rate for the matched accounts (column 9, lines 2-7), calculating an effective attrition rate (column 9, lines 2-9) for each forecast period (column 10, lines 1-7), performing the NPV attrition rule (column 9, lines 2-9) and storing the NPV expected value (column 23, lines 25-26 and column 24, lines 17-23).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the process of matching the matched accounts to results of NPV forecast rules, obtaining an attrition rate for the matched accounts, calculating an effective attrition rate for each forecast period, performing the NPV attrition rule to calculate an NPV expected value using the effective attrition rate and storing the NPV expected value as taught by Sandretto to account for both the increases and decreases of value needed to more accurately estimate future value based upon the iterative and adaptive process disclosed by Johnson.

As per claims 2, 20 and 38

Johnson does not specifically teach applying NPV forecast rules to the selected accounts and applying the NPV attrition rules to results of the forecast rules. Sandretto teaches applying NPV forecast rules to the selected accounts and applying the NPV attrition rules to results of the forecast rules (column 8, line 60 - column 9, line 9).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to apply NPV forecast rules to the selected accounts and applying the NPV attrition rules to results of the forecast rules as taught by Sandretto to account for both the increases and decreases of value needed to more accurately estimate future value.

* * *

4. Applicant's arguments have been fully considered but they are not persuasive.

Applicant states that the prior art does "not teach or suggest NPV attrition rules, forecast rules, attrition rates, effective attrition rates, or the specific steps or functions."

Sandretto teaches matching the matched accounts to results of NPV forecast rules (column 8, lines 65-67), obtaining an attrition rate for the matched accounts (column 9, lines 2-7), calculating an effective attrition rate (column 9, lines 2-9) for each forecast period (column 10, lines 1-7), performing the NPV attrition rule (column 9, lines 2-9) and storing the NPV expected value (column 23, lines 25-26 and column 24, lines 17-23).

Examiner notes that applicant's specification conceptually defines attrition rates as "the rate at which a cash flow will be decreased" (page 8, lines 25-26). Johnson teaches a discount factor. One skilled in the art at the time the invention was made would understand that a discount factor is a rate used to discount or decrease future cash flow. Sandretto also teaches applying attrition rules/risk/rates (abstract & column 8, line 60 - column 9, line 9).

Examiner further notes that propensity is the probability that something is likely to happen, a risk measure. Johnson teaches risk. One skilled in the art at the time the invention was made would understand that propensity rules are rules that measure and determine risk, and consequently rates used to discount or decrease future cash flow to obtain a net present value. Sandretto further teaches applying propensity rules/amounts/rates (abstract & column 4, lines 13-16 & column 5, lines 12-14).

Therefore, it would have also been obvious to one skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk and are used as taught by Johnson and Sandretto in order to determine an asset's discount rate and therefore future value.

Examiner lastly notes that applying both attrition and propensity rates/rules/etc. as measures of risk as taught by Johnson and Sandretto allow for accounting for both the increases and decreases of value needed to more accurately estimate future value resulting from expected price changes such as inflation.

Applicant's attorney respectfully disagrees with this analysis, and submits that Applicant's independent claims 1, 19 and 37 are patentable over the references.

With regard to the assertion that Sandretto teaches "applying one or more NPV forecast rules to the selected accounts and applying one or more NPV attrition rules to results of the NPV forecast rules using the selected amounts and rates" at column 8, line 60 – column 9, line 9 (which were originally in claims 2, 20 and 38, but now are in independent claims 1, 19 and 38),

Applicant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

> Sandretto: column 8, line 60 – column 9, line 19
>
> **It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; (5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset;** (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "applying one or more NPV forecast rules to the selected accounts and applying one or more NPV attrition rules to results of the NPV forecast rules using the selected amounts and rates" being performed in this portion of Sandretto. "NPV forecast rules" are defined at page 12, line 21 et seq. of Applicant's specification, while "NPV attrition rules" are defined at page 18, line 19 et seq. of Applicant's specification. There is no discussion of NPV forecast rules or NPV attrition rules in this portion of Sandretto. Instead, this portion of Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset.

With regard to the assertion that Johnson teaches "matching the NPV attrition rule against the selected accounts" at column 4, lines 10-15 and column 9, lines 3-11, Applicant's attorney disagrees. These portions of Johnson are bolded in the paragraphs reproduced below:

Johnson: column 4, lines 10-19

Individual asset data (not shown) for each asset in portfolio 12 is entered into a database 76 from which selected data 78 is retrieved based on a given criteria 80 for the iterative and adaptive process 32. When criteria 80 is established for valuation of any asset, that established criteria 80 is stored in database 76 for use in valuating other asset data in database 76 which shares such an established criteria. Iterative and adaptive valuation process 32 thus develops 82 valuations (described below) and groups 84 them for use in bidding.

Johnson: column 9, lines 3-26

In general, NPV is defined as:

$$NPV = c_0 + \frac{c_1}{1+r}$$

where C.sub.0 is the investment at time 0, C.sub.1 is the expected payoff at time 1, and r is the discount factor. The basic idea is that a dollar today is worth more than a dollar tomorrow.

In the case of insurance policies, NPV is defined as:

$$NPV = \sum P - \sum E - (\sum C) \times \frac{A}{E_w}$$

where P is the premium, E is the expected nominal cost, and C is the claim cost. In essence, Equation B is how net income as the difference of profit and weighted expected risk is generated. Note that the summation is summing across all the policies in a specific segment. Also note that all the premium, nominal cost, and claim cost have been discounted before entering the equation. As a result, a profitability score is generated.

There is no "matching the NPV attrition rule against the selected accounts" being performed in these portions of Johnson. In these portions of Johnson, there is no matching being performed, no matched accounts, and no discussion of NPV attrition rules. Instead, these portions of Johnson refer only to selecting individual asset data and performing a general Net Present Value (NPV) calculation. Moreover, these portions of Johnson refer only to a discount factor, which is not an attrition rate (an attrition rate is defined in Applicant's specification as the rate at which a cash flow will be decreased, whereas a discount factor is a multiplication factor that converts a projected cost or benefit in a future year into its present value).

With regard to the assertion that Sandretto teaches "matching the matched accounts to the results of the NPV forecast rules" at column 8, lines 65-67, Applicant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

Sandretto: column 8, line 60 – column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; **(3) adjust the original set of cash flows and each additional set of cash flows for expected inflation;** (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; (5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "matching the matched accounts to the results of the NPV forecast rules" being performed in this portion of Sandretto. In this portion of Sandretto, there is no matching being performed, no matched accounts, and no discussion of NPV forecast rules. Instead, this portion of Sandretto refers only to adjusting original cash flows for expected inflation.

With regard to the assertion that Sandretto teaches "obtaining an attrition rate for the matched accounts" at column 9, lines 2-7, Applicant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

Sandretto: column 8, line 60 – column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; **(5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows);** (6) discount

the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "obtaining an attrition rate for the matched accounts" being performed in this portion of Sandretto. In this portion of Sandretto, there is no matching being performed, no matched accounts, and no discussion of attrition rates. Instead, this portion of Sandretto refers only to determining a discount rate using an initial risk measure, and discount rates are not attrition rates (attrition rates are defined in Applicant's specification as the rate at which a cash flow will be decreased, whereas a discount rate is an interest rate that states future cash flows in current dollars).

With regard to the assertion that Sandretto teaches "calculating an effective attrition rate for each forecast period" at column 9, lines 2-9 and column 10, lines 1-7, Applicant's attorney disagrees. These portions of Sandretto are bolded in the paragraphs reproduced below:

Sandretto: column 8, line 60 – column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; **(5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset;** (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats

steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

Sandretto: column 10, lines 1-7

The process begins by estimating an initial set of financial statements and cash flows for each asset (only cash flows if the asset is a bond or similar asset) for some number of periods using estimated operating, financing, accounting and economic variables an analyst has input into the process. Estimated cash flows may be also be adjusted for expected price changes, such as inflation.

There is no "calculating an effective attrition rate for each forecast period" being performed in these portions of Sandretto. In these portions of Sandretto, there is no discussion of effective attrition rates, and no discussion of calculations being performed for each forecast period. Instead, these portions of Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset.

With regard to the assertion that Sandretto teaches "performing the NPV attrition rule to calculate an NPV expected value using the effective attrition rate" at column 9, lines 2-9, Applicant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

Sandretto: column 8, line 60 – column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; **(5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset;** (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress

> simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "performing the NPV attrition rule to calculate an NPV expected value using the effective attrition rate" being performed in this portion of Sandretto. In this portion of Sandretto, there is no discussion of an NPV attrition rule, and no discussion of effective attrition rates. Instead, this portion of Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset.

In summary, the portions of Johnson cited by the Office Action merely refer to establishing valuations of assets using a general definition of NPV (Net Present Value), and the portions of Sandretto cited by the Office Action merely refer to determining present values for the cash flows of assets, in the context of a method for estimating an asset's risk and net present value.

However, the combination of Johnson and Sandretto does not calculate all the values recited in Applicant's independent claims in the same manner as Applicant's independent claims. Indeed, the portions of Johnson and Sandretto cited against Applicant's independent claims 1, 19 and 37, do not teach or suggest NPV forecast rules, NPV attrition rules, attrition rates, effective attrition rates, or the specific steps or functions performed by Applicant's claims.

The remaining references, namely Atkins and Kuhlemeyer, fail to overcome these deficiencies of Johnson and Sandretto. Moreover, this is conceded by the Office Action because these references were cited only for teaching limitations of Applicant's dependent claims.

Consequently, the various elements of Applicant's claimed invention together provide operational advantages over Johnson, Sandretto, Atkins, and Kuhlemeyer. In addition, Applicant's invention solves problems not recognized by Johnson, Sandretto, Atkins, and Kuhlemeyer.

Thus, Applicant's attorney submits that independent claims 1, 19, and 37 are allowable over Johnson, Sandretto, Atkins, and Kuhlemeyer. Further, dependent claims 3-9, 11-18, 21-27, 29-36, 39-45 and 47-54 are submitted to be allowable over Johnson, Sandretto, Atkins, and Kuhlemeyer in the same manner, because they are dependent on independent claims 1, 19, and 37, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 3-9, 11-18, 21-27, 29-36, 39-45 and 47-54 recite additional novel elements not shown by Johnson, Sandretto, Atkins, and Kuhlemeyer.

III. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited.

Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicant's undersigned attorney.

Respectfully submitted,

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